CLAIMS

1.   A method for cost-effective routing and transmission of messages in a telecommunications system having both a computer network and a switching-oriented network, the method comprising the steps of:

5   connecting the computer network to the switching-oriented network via a plurality of gateways which are set up for transmitting messages between the computer network and the switching-oriented network;

providing each of the gateways with one address in both networks in accordance with a respective network-specific transmission

10   protocol;

providing the switching-oriented network with a plurality of telecommunications terminals, each telecommunication terminal having an associated telephone number;

assigning names to the addresses of the gateways in the

15   computer network which can be stored together with the associated address in at least one data bank in the computer network;

associating the telecommunications terminals, which can be predetermined in the switching-oriented network and whose telephone numbers have parts which can be predetermined that are identical, directly

20   with one of the gateways whose address and the computer network is assigned a name formed from the parts of the telephone numbers which are common to the predetermined telecommunications terminals; and

transmitting the messages from a first telecommunications terminal, which is associated with the computer network, to one of the

25   telecommunications terminals which can be predetermined in the switching-oriented network, via the gateway which is directly associated with the predetermined telecommunications terminal in the switching-oriented network, the name of the gateway being checked by the first telecommunications terminal in order to find the gateway in the data bank of the computer network.

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2.   A method for cost-effective routing and transmission of messages in a telecommunications system as claimed in claim 1, wherein the computer network is the Internet, and the gateways have associated domain names.

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3.   A method for cost-effective routing and transmission of messages in a telecommunications system as claimed in claim 1, wherein the messages are transmitted between the first telecommunications terminal and the second telecommunications terminal via the gateway, whose name

10   provides a best match with the telephone number of the second telecommunications terminal.

4.   A method for cost-effective routing and transmission of messages in a telecommunications system as claimed in claim 1, wherein the

15   plurality of gateways are organized hierarchically, with each of the gateways knowing which of the gateways are immediately subordinate to it.

5.   A method for cost-effective routing and transmission of messages in a telecommunications system as claimed in claim 4, wherein the

20   gateways are set up to find out whether a gateway exists which is subordinate to it and whose name matches parts of the telephone number which can predetermined, with the gateway having no further gateway subordinate to it, based on the telephone number, representing a lowest gateway in the hierarchy.

25   6.   A method for cost-effective routing and transmission of messages in a telecommunications system as claimed in claim 4, wherein the messages are transmitted between the first telecommunications terminal and the second telecommunications terminal via the gateway which is a lowest gateway in the hierarchy.

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7.   A telecommunication system for cost-effective routing and transmission of messages therein, comprising:

a computer network;

a switching-oriented network;

a plurality of telecommunications terminals associated with the switching-oriented network, each of the telecommunications terminals having an associated telephone number; and

a plurality of gateways for connecting and transmitting messages between the computer network and the switch-oriented network, each gateway having one address in both networks in accordance with a respective network-specific transmission protocol; and

wherein the addresses of the gateways in the computer network can be assigned names which can be stored together with the associated address in at least one data bank in the computer network, such that the telecommunications terminals, which can be predetermined in the switching-oriented network and whose telephone numbers have parts which can be predetermined that are identical, are directly associated with one of the gateways whose address in the computer network is assigned a name formed from the parts of the telephone numbers which are common to the predetermined telecommunications terminals, and the messages are transmitted from a first telecommunications terminal, which is associated with a computer network, to one of the telecommunications terminals which can be predetermined in the switching-oriented network, via the gateway which is directly associated with the predetermined telecommunications terminal in the switching-oriented network, with the first telecommunications terminal being set up to check the data bank in the computer network in order to find the gateway in the computer network.

8.   A telecommunications system for cost-effective routing and transmission of messages therein as claimed in claim 7, wherein the computer network is the Internet, and the gateways have associated domain names.

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9. A telecommunications system for cost-effective routing and transmission of messages therein as claimed in claim 7, wherein the messages are transmitted between the first telecommunications terminal and the second telecommunications terminal via the gateway whose name provides a best match with the telephone number of the second telecommunications terminal.

10. A telecommunications system for cost-effective routing and transmission of messages therein as claimed in claim 7, wherein the plurality of gateways are organized hierarchically, with each of the gateways knowing which of the gateways are immediately subordinate to it.

11. A telecommunications system for cost-effective routing and transmission of messages therein as claimed in claim 10, wherein the gateways are set up to find out whether a gateway exists which is subordinate to it and whose name matches parts of the telephone number which can be predetermined, with the gateway having no further gateway subordinate to it, based on the telephone number, representing a lowest gateway in the hierarchy.

12. A telecommunication system for cost-effective routing and transmission of messages therein as claimed in claim 11, wherein the messages are transmitted between the first telecommunications terminal and the second telecommunications terminal via the gateway which is a lowest gateway in the hierarchy.